This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-40 (canceled).

41 (currently amended). An analysis system comprising a main body having a surface and four peripheral regions bounding the surface, at least one analysis unit arranged in the main body, each analysis unit comprising two first reservoirs each defined by a reservoir floor and a reservoir wall, and two second reservoirs each defined by a reservoir floor and a reservoir wall, the two first reservoirs being in flow connection by a first passage and the two second reservoirs being in flow connection by a second passage, the first and second passages being connected to each other by a common intersection region; two electrical conductors arranged in the main body, each of the electrical conductors having a first end region and a second end region, a first one of the electrical conductors having the first end region connected to one of the first reservoirs and the second end region connected to or constituting a first contact point in at least one of the peripheral surface regions, and a second one of the electrical conductors having the first end region connected to one of the

second reservoirs and the second end region connected to or constituting a second contact point in the peripheral surface region, at least part of the reservoir walls constitutes a part of the electrical conductors.

- 42 (previously presented). The analysis system of claim 41, wherein the main body comprises a base plate and a cover plate, the base plate being joined to the cover plate by surfaces thereof.
- 43 (previously presented). The analysis system of claim
 42, wherein the base plate and the cover plate are made from
 plastics selected from the group consisting of
 polymethacrylate, pulycarbonate, polystyrene, polysulphona and
 cycloolefin copolymer.
- 44 (previously presented). The analysis system of claim 42, wherein one of the plates is at least partially opaque.
- 45 (previously presented). The analysis system of claim
 42, wherein the first end regions of the electrical conductors
 are electrodes extending between the reservoir floors and an
 underside of the base plate.

- wherein at least one of the passages is defined by recesses in at least one of the surfaces of the base plate and the cover plate, and at least those parts of the surfaces of the base plate and the cover plate and the cover plate immediately surrounding the reservoirs and the passages are joined in a fluid-tight seal by a joining method pelected from the group consisting of bonding, applying polymerizable bonding agents, adhestion adhesion by Lemporary treatment with a solvent, heat sealing, ultrasonic welding and laser welding.
- 47 (previously presented). The analysis system of claim
 41, wherein the electrical conductors are connected to the main
 body by a connection method selected from the group consisting
 of bonding, vapor deposition, insertion in recesses, and
 integral molding.
- 48 (previously presented). The analysis system of claim
 41, wherein at least part of the reservoir floors constitutes a
 part of the electrical conductors.
 - 49 (canceled).
- 50 (currently amended). The analysis system of claim 41, wherein each one of the contact points has a contact

surface having a predetermined internal diameter and each one of the reservoirs has an opening having a predetermined internal diameter. The internal diameter of the contact surfaces being greater than the internal diameter of the openings.

- 51 (previously presented). The analysis system of claim 41, wherein each one of the contact points is disposed at one of the peripheral surface regions.
- 52 (previously presented). The analysis system of claim
 41, wherein the electrical conductors are made from a material
 selected from the group consisting of metal, electrical
 conductive plastics, electrically conductive paste and
 electrically conductive varnish.
- 53 (previously presented): The analysis system of claim 41, wherein the main body has a size constituting a standard for a microtitre plate.
- 54 (previously presented) The analysis system of claim 41, wherein several analysis units are arranged in a layout constituting a standard for a microtitre plate.

- 55 (currently amended). The analysis system of claim 41, wherein a predetermined number of the analysis units are arranged in the main body, the number being selected from the group of numbers solving the mathematical formula $3 \times \frac{2N}{2} \times \frac{2^N}{N}$, N being a whole number.
- 56 (previously presented). The analysis system of claim 41, wherein 96 analysis units are arranged in the main body.
- 57 (previously presented). The analysis system of claim 41, wherein the passages are micro-passages.
- 58 (previously presented). The analysis system of claim 41, wherein the first and second reservoirs are laid out in a pattern constituting a standard for a microtitre plate.
- 59 (previously presented). The analysis system of claim 41, wherein a plurality of analysis units are arranged in parallel rows in the main body, the first and the second reservoirs are arranged in parallel rows, the rows of the first and second reservoirs having half the distance from each other as the rows of the analysis units.